

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Bianca A. Thomae et al.      Art Unit : 1645  
Serial No. : 10/755,018      Examiner : Unknown  
Filed : January 9, 2004  
Title : PHENYLETHANOLAMINE-N-METHYLTRANSFERASE SEQUENCE  
VARIANTS

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL

The following correspondence relating to this application is enclosed for filing:

1. Information Disclosure Statement (1 page);
2. Form PTO-1449 (3 pages);
3. Copies of Cited References (44 references); and
4. A Return Postcard.

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Respectfully submitted,

Date: May 12, 2005

Elizabeth N. Kaytor  
Elizabeth N. Kaytor, Ph.D.  
Reg. No. 53,103

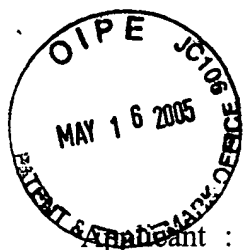
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INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form. Under 37 C.F.R. § 1.98 (a)(2)(ii), only copies of foreign patent documents and/or non-patent literature are enclosed. Copies of any listed U.S. patents or U.S. patent application publications can be provided upon request.

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Respectfully submitted,

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Substitute Form PTO-1449

U.S. Department of Commerce  
Patent and Trademark Office

Attorney's Docket No.

07039-440001

Application No.

10/755,018

**Information Disclosure Statement  
by Applicant**

(Use several sheets if necessary)

Applicant

Bianca A. Thomae et al.

Filing Date

January 9, 2004

Group Art Unit

1645

**U.S. Patent Documents**

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	5,451,683	09/19/05	Barrett et al.			
	AB	5,733,729	03/31/98	Lipshutz et al.			
	AC	5,770,722	06/23/98	Lockhart et al.			

**Foreign Patent Documents or Published Foreign Patent Applications**

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AD	WO 98/20019	05/14/98	PCT				
	AE	WO 99/57318	11/11/99	PCT				

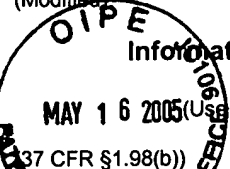
**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
	AF	GenBank Accession No. J03727 dated 01/08/95
	AG	GenBank Accession No. X52730 dated 04/24/93
	AH	Böttner et al., "Increased Body Fat Mass and Suppression of Circulating Leptin Levels in Response to Hypersecretion of Epinephrine in Phenylethanolamine-N-Methyltransferase (PNMT)-Overexpressing Mice," <u>Endocrinology</u> , 2000, 141(11):4239-4246
	AI	Caine et al., "Recombinant human phenylethanolamine N-methyltransferase: overproduction in <i>Escherichia coli</i> , purification, and characterization," <u>Protein Expr. Purif.</u> , 1996, 8(2):159-166
	AJ	Chadwick et al., "Heterozygote and Mutation Detection by Direct Automated Fluorescent DNA Sequencing Using a Mutant <i>Taq</i> DNA Polymerase," <u>BioTechniques</u> , 1996, 20:676-683
	AK	Cibelli et al., "Cloned Transgenic Calves Produced from Nonquiescent Fetal Fibroblasts," <u>Science</u> , 1998, 280:1256-1258
	AL	Cleland, "Computer Programmes For Processing Enzyme Kinetic Data," <u>Nature</u> , 1963, 198:463-365
	AM	Cote et al., "Generation of human monoclonal antibodies reactive with cellular antigens," <u>Proc. Natl. Acad. Sci. USA</u> , 1983, 80:2026-2030
	AN	Cole et al., "The EBV-Hybridoma Technique and its Application to Human Lung Cancer," <u>Monoclonal Antibodies and Cancer Therapy</u> , 1985, Alan R. Liss, Inc., pp. 77-96
	AO	Excoffier and Slatkin, "Maximum-Likelihood Estimation of Molecular Haplotype Frequencies in a Diploid Population," <u>Mol. Biol. Evol.</u> , 1995, 12(5):921-927
	AP	Gearhart et al., "Phenylethanolamine N-methyltransferase has beta-carboline 2N-methyltransferase activity: hypothetical relevance to Parkinson's disease," <u>Neurochem. Int.</u> , 2002, 40(7):611-620
	AQ	Gordon et al., "Consed: A Graphical Tool for Sequence Finishing," <u>Genome Res.</u> , 1998, 8:195-202
	AR	Guatelli et al., "Isothermal, <i>in vitro</i> amplification of nucleic acids by a multienzyme reaction modeled after retroviral replication," <u>Proc. Natl. Acad. Sci. USA</u> , 1990, 87:1874-1878

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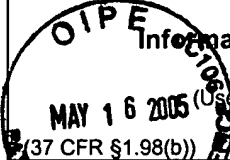
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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 07039-440001	Application No. 10/755,018
 <p><b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)</p>		Applicant <b>Bianca A. Thomae et al.</b>	
		Filing Date January 9, 2004	Group Art Unit 1645

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AS	Hacia et al., "Detection of heterozygous mutations in <i>BRCA1</i> using high density oligonucleotide arrays and two-colour fluorescence analysis," <i>Nature Genet.</i> , 1996, 14:441-447
	AT	Halushka et al., "Patterns of single-nucleotide polymorphisms in candidate genes for blood-pressure homeostasis," <i>Nature Genet.</i> , 1999, 22:239-247
	AU	Hartl and Clark, "Chromosomes and Heredity," <i>Principles of Population Genetics</i> , 3rd Edition, 1997, Sinauer Associates, Inc., Sunderland, MA, pp. 96-106
	AV	Hedrick, <i>Genetics of Populations</i> , 2nd Edition, 2000, Jones and Bartlett, Sudbury, MA, pp. 396-405
	AW	Huse et al., "Generation of a Large Combinatorial Library of the Immunoglobulin Repertoire in Phage Lambda," <i>Science</i> , 1989, 246:1275-1281
	AX	Hyrup and Nielsen, "Peptide Nucleic Acids (PNA): Synthesis, Properties and Potential Applications," <i>Bioorgan. Med. Chem.</i> , 1996, 4(1):5-23
	AY	Köhler and Milstein, "Continuous cultures of fused cells secreting antibody of predefined specificity," <i>Nature</i> , 1975, 256(5512):495-497
	AZ	Kozbor and Roder, "The production of monoclonal antibodies from human lymphocytes," <i>Immunology Today</i> , 1983, 4:72-79
	AAA	Lewis, "PCR's Competitors Are Alive and Well and Moving Rapidly Towards Commercialization," <i>Genetic Engineering News</i> , 1992, 12(9):1-3
	ABB	Long et al., "An E-M Algorithm and Testing Strategy for Multiple-Locus Haplotypes," <i>Am. J. Hum. Genet.</i> , 1995, 56:799-810
	ACC	Mann et al., "Association between the phenylethanolamine N-methyltransferase gene and multiple sclerosis," <i>J. Neuroimmunol.</i> , 2002, 124(1-2):101-105
	ADD	Mann et al., "Phenylethanolamine N-methyltransferase ( <i>PNMT</i> ) Gene and Early-Onset Alzheimer Disease," <i>Am. J. Med. Genet.</i> , 2001, 105(4):312-316
	AEE	Molinoff et al., "A Sensitive Enzymatic Assay for Dopamine- $\beta$ -Hydroxylase," <i>J. Pharmacol. Exp. Ther.</i> , 1971, 178(3):425-431
	AFF	Myakishev et al., "High-Throughput SNP Genotyping by Allele-Specific PCR with Universal Energy-Transfer-Labeled Primers," <i>Genome Research</i> , 2001, 11(1):163-169
	AGG	Nickerson et al., "PolyPhred: automating the detection and genotyping of single nucleotide substitutions using fluorescence-based resequencing," <i>Nucl. Acids Res.</i> , 1997, 25(14):2745-2751
	AHH	Prince et al., "Robust and Accurate Single Nucleotide Polymorphism Genotyping by Dynamic Allele-Specific Hybridization (DASH): Design Criteria and Assay Validation," <i>Genome Res.</i> , 2001, 11(1):152-162
	AII	Schafer and Hawkins, "DNA variation and the future of human genetics," <i>Nat. Biotechnol.</i> , 1998, 16:33-39
	AJJ	Shastri, "Gene disruption in mice: Models of development and disease," <i>Mol. Cell. Biochem.</i> , 1998, 181:163-179
	AKK	Stoneking et al., "Population Variation of Human mtDNA Control Region Sequences Detected by Enzymatic Amplification and Sequence-specific Oligonucleotide Probes," <i>Am. J. Hum. Genet.</i> , 1991, 48:370-382
	ALL	Summerton and Weller, "Morpholino Antisense Oligomers: Design, Preparation, and Properties," <i>Antisense Nucleic Acid Drug Dev.</i> , 1997, 7:187-195
	AMM	Tai et al., "Glucocorticoid Responsiveness of the Rat Phenylethanolamine N-methyltransferase Gene," <i>Mol. Pharmacol.</i> , 2002, 61(6):1385-1392

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Other Documents (include Author, Title, Date, and Place of Publication)		
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	ANN	Terwilliger and Ott, "Linkage Disequilibrium between Alleles at Marker Loci," <u>Handbook of Human Genetic Linkage</u> , 1994, The Johns Hopkins University Press, Baltimore, pp. 188-193
	AOO	Underhill et al., "Detection of Numerous Y Chromosome Biallelic Polymorphisms by Denaturing High-Performance Liquid Chromatography," <u>Genome Res.</u> , 1997, 7:996-1005
	APP	Wakayama et al., "Full-term development of mice from enucleated oocytes injected with cumulus cell nuclei," <u>Nature</u> , 1998, 394(6691):369-374
	AQQ	Warthan et al., "Phenylethanolamine N-methyl transferase expression in mouse thymus and spleen," <u>Brain Behav. Immun.</u> , 2002, 16(4):493-499
	ARR	Weiss, "Hot Prospect for New Gene Amplifier," <u>Science</u> , 1991, 254:1292-1293
	ASS	Wilkinson, "Statistical Estimations in Enzyme Kinetics," <u>Biochem. J.</u> , 1961, 80:324-332
	ATT	Wilmut et al., "Viable offspring derived from fetal and adult mammalian cells," <u>Nature</u> , 1997, 385(6619):810-813
	AUU	Wong et al., "Human GM-CSF: Molecular Cloning of the Complementary DNA and Purification of the Natural and Recombinant Proteins," <u>Science</u> , 1985, 228:810-815

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